

Shipping Aug 11

Work Order ID 135044

135044

Page 1

July 27, 2015 1:03:11 PM

Item ID: D022-661-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: R22 Bearpaws

Stop

NS2

Start Date: 7/27/2015 Start Qty: 3.00

3

Cust Item ID:

Required Date: 8/10/2015 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: *SH*Date: *20150727*

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3076

Rev A1

JA

SH 15-07-29

DAS
02
9-89

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPPD022-661-011 CHG002

AUG 10 2015

DAS
28
9-89

Pick Kit

③

JA

JUL 28 2015

110

QC4- 100% Inspect kits for completeness

0.00

110

QC

Memo

0.00

Quality Control

DAS
02
9-89

AUG 10 2015

AUG 10 2015

120

0.00

120

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D022-661-011

Location: *FG 19*DAS
02
9-89

AUG 10 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : _____			

Work Order ID 135044

July 27, 2015 1:03:11 PM

135044

Page 2

Item ID: D022-661-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: R22 Bearpaws

Stop ***NS2***

Start Date: 7/27/2015 Start Qty: 3.00

3

Cust Item ID:

Required Date: 8/10/2015 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursTool ID Tool # Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

MLJ AUG 11 2015

MLJ AUG 11 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐			FAULT CATEGORY Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :					

Picklist Print

July 27, 2015 1:03:17 PM

Page 1

4

Work Order ID: 135044

135044

Parent Item: D022-661-011

D022-661-011

Parent Item Name: R22 Bearpaws

Start Date: 7/27/2015

Required Date: 8/10/2015

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:C04.02.19 Added tolerance and ref to DSK086-12 to Step 3KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2182B		Manufactured	No			110	f	376.3780	0.93	2.79			
--------	--	--------------	----	--	--	-----	---	----------	------	------	--	--	--

D2182B

Rubber Cushion - Black (\$Per Foot)

4x 2.8" per kit

DAS
02
9-89

DAS
38
9-89

Location

Loc Qty

Loc Code

ST411

39.378

108914

1.5

115189

21.5

128976

16.378

st640

337

(130427)

337

2.79

D2274

Manufactured No

110 Each

173.0000

8

24

D2274

Radius Block

4x 2.8" per kit

DAS
02
9-89

Location

Loc Qty

Loc Code

FG

12

86855

12

ST

24

110264

24

ST006

137

127579

11

(131031)

126

24

**

JA

JUL 28 2015

DAS
26
9-89

Picklist Print

July 27, 2015 1:03:17 PM

Page 2

Work Order ID: 135044

135044

Parent Item: D022-661-011

D022-661-011

Parent Item Name: R22 Bearpaws

Start Date: 7/27/2015

Required Date: 8/10/2015

Start Qty: 3.00

Required Qty: 3.00

D2529

Manufactured No

110 Each

234.0000

8

24

D2529

Washer

**

JA

DAS

26

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

ST007

233

(131945)

233

ST008

1

128950

1

24

D2870

Manufactured No

110 Each

130.0000

2

6

D2870

Clamp

**

JA

DAS

26

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

Mezz

130

16244

31

(26491)

99

6

D2871

Manufactured No

110 Each

158.0000

2

6

D2871

Clamp

**

JA

JUL 28 2015

DAS

26

9-89

DAS
02
9-89

Location

Loc Qty

Loc Code

Mezz

158

(16245)

51

16838

104

(9733)

3

3

3

D3076-1

Manufactured No

110 Each

0.0000

2

6

D3076-1

R22 Bearpaw

**

JA

DAS

26

9-89

DAS
02
9-89

8135045

6

~~SH07-07-711~~

AUG 10 2015

~~JUL 28 2015~~

July 27, 2015 1:03:18 PM

Shop Packet Print

Page 2

Picklist Print

July 27, 2015 1:03:18 PM

Page 3

Work Order ID: 135044

135044

Parent Item: D022-661-011

D022-661-011

Parent Item Name: R22 Bearpaws

Start Date: 7/27/2015

Required Date: 8/10/2015

Start Qty: 3.00

Required Qty: 3.00

AN4-13A

Purchased

No

110

Each

378.0000

8

24

AN4-13A

Bolt

DAS

02

9-89

Location

Loc Qty

Loc Code

FG

20

122808

20

ST325A

296

m132551

296

ST344

62

m131957

62

AN960JD416

NAS1149D0463J

Purchased

No

110

Each

0.0000

8

24

AN960JD416

m132035

Washer

DAS

02

9-89

JA

DAS
26

24

JUL 28 2015

DAS
26
9-89

July 27, 2015 1:03:18 PM

Shop Packet Print

Page 3

Picklist Print

July 27, 2015 1:03:18 PM

Page 4

Work Order ID: 135044

135044

Parent Item: D022-661-011

D022-661-011

Parent Item Name: R22 Bearpaws

Start Date: 7/27/2015

Required Date: 8/10/2015

Start Qty: 3.00

Required Qty: 3.00

MS21042L4

Purchased

No

110

Each

3,376.000

8

24

MS21042L 4

Locknut

JA

JUL 28 2015

DAS
28
8-89

DAS
02
8-89

Location

Loc Qty

Loc Code

FP001

2

m124231

2

GA

142

m127813

142

ST260a

170

m130799

56

m131803

6

m132262

108

ST305

3062

m128300

8

m128798

12

m130388

7

m130922

97

m131618

12

m132123

56

m132382

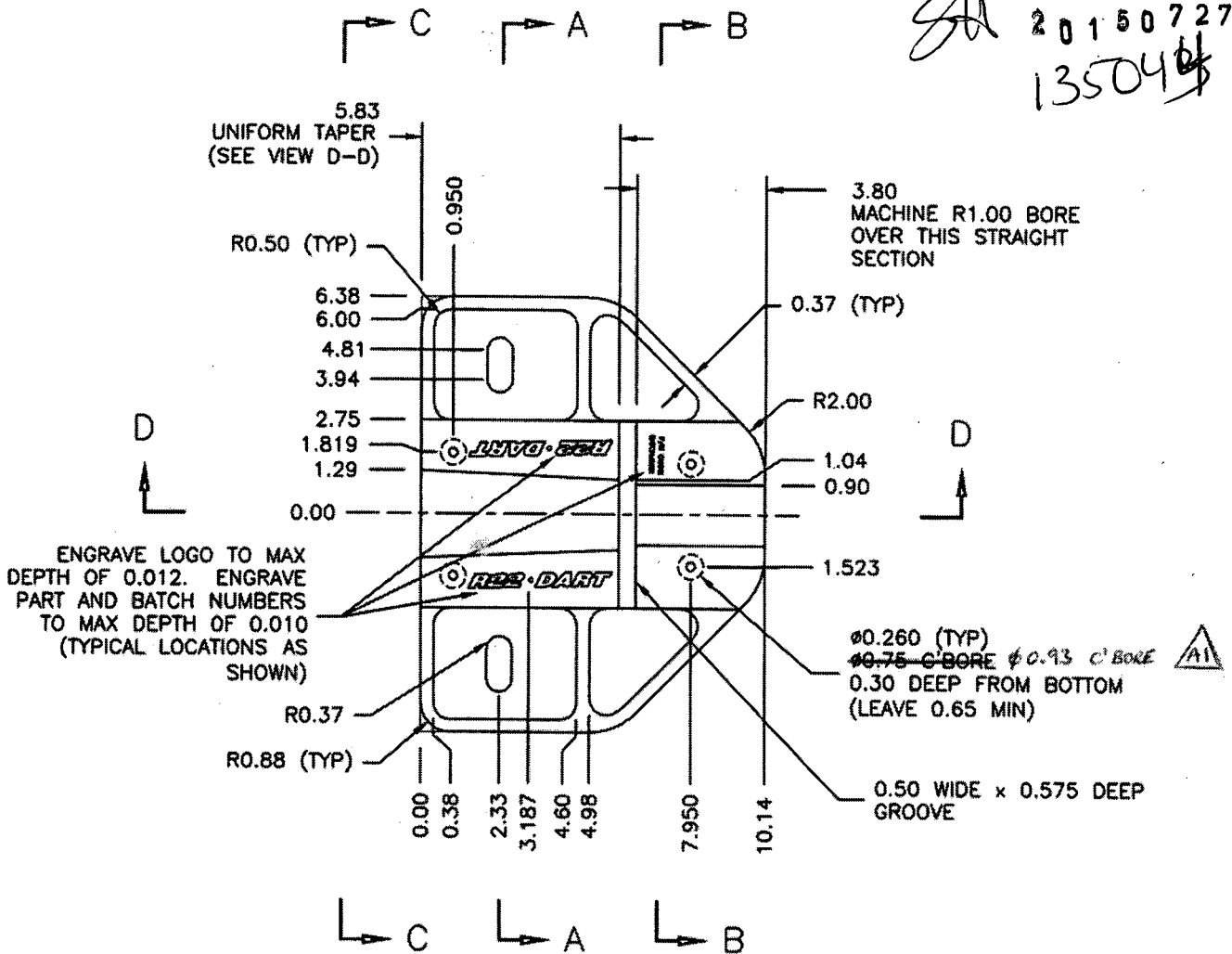
2870

ST 24



DESIGN #	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3076	REV. A SHEET 1 OF 2
DATE 02.01.08		TITLE R22 BEARPAW	SCALE 1:5
A	02.01.08	NEW ISSUE	
A1	03.01.06	$\phi 0.93$ WAS $\phi 0.75$	

RELEASED
02.01.10



D3076-1 BEARPAW (FLAT PATTERN)

NOTES:

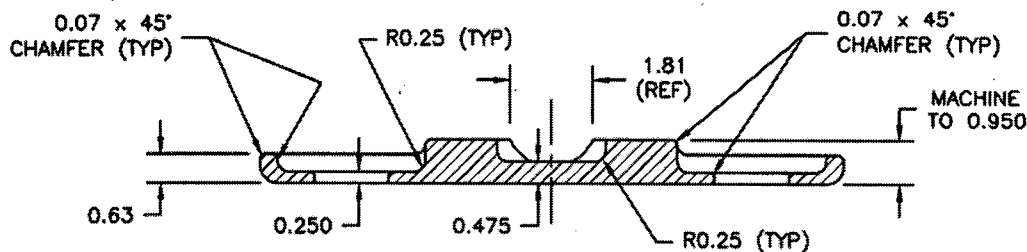
- 1) BEARPAW IS SYMMETRIC ABOUT CENTER LINE
- 2) MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689, 1.00" THICK (MACHINE TO 0.950)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

Copyright © 2002 by DART AEROSPACE LTD

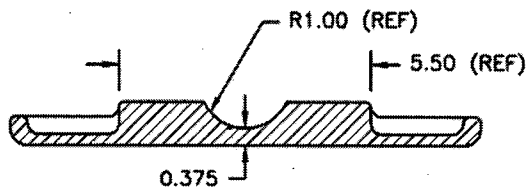
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



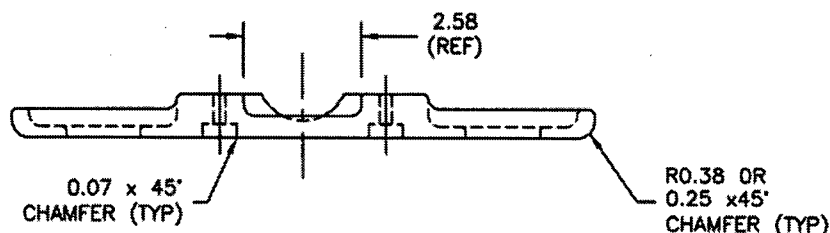
DESIGN #	DRAWN BY RT	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D3076	REV. A SHEET 2 OF 2
DATE 02.01.08		TITLE R22 BEARPAW	SCALE 1:4



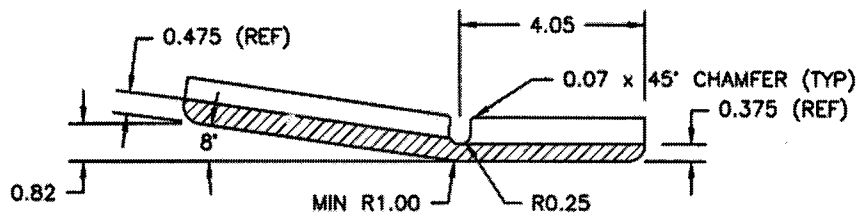
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D (AFTER BENDING)

RELEASED
02.01.10

Copyright © 2002 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

32.3 WEIGHT AND BALANCE

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D022-661-011 Bearpaw Installation on model R22 aircraft	4.6 lb 2.10 kg	0.0 in 0.0 m	0.0 lb-kg 0.0 m-kg	121.1 in 3.08 m	557.1 in-lb 6.47 m-kg

32.4 PARTS LIST

Qty	Part Number	Description
X	D022-661-011	BEARPAW INSTALLATION
4	D2182B028	Rubber Cushion
8	D2274	Radius Block
8	D2529	Washer
2	D2870	Clamp
2	D2871	Clamp
2	D3076-1	Bearpaw
8	AN4-13A	Bolt
8	AN960JD416	Washers
8	MS21042L4	Nut (or MS21042-4)